

### **REMARKS**

Claims 1-2, 13, and 20 stand rejected under 35 USC §103(a) as being unpatentable over Cohen et al., U.S. patent 5,946,380 in view of Hogan et al, U.S. patent 6,016,343. Claims 3-4, 7-12, 14 and 16-19 stand rejected under 35 USC §103(a) as being unpatentable over Cohen et al., U.S. patent 5,946,380 in view of Hogan et al, U.S. patent 6,016,343 and further in view of Jankowitz et al., U.S. patent 5,875,236. Claims 5-6 and 15 stand rejected under 35 USC §103(a) as being unpatentable over Cohen et al., in view of Hogan et al, U.S. patent 6,016,343 and further in view of Sawyer et al., U.S. patent 6,324,271.

Reconsideration and allowance of each of the claims 1-20 is respectfully requested.

Cohen et al., U.S. patent 5,946,380 discloses a communication system that includes a network switch coupled through a telephone line uniquely associated with each customer for budgeted telephone calling time and amount, either pre-paid or post-paid, the budgeted amount being recorded in the system for calling purposes. A server is coupled to the switch for automated control of the budgeted telephone calls and costs. The server includes a control processor having access to databases for recorded budgeted amounts and call routing. A voice response unit is coupled to the processor and sends messages to the calling customer at the beginning of each budget telephone call indicating remaining budgeted telephone calling time and amount available to the calling purposes. The processor debits the customer account by an

amount reflecting the call costs as the call proceeds. A voice message advises the calling customer when the available time and costs for the budgeted telephone call will terminate. Depending upon customer preference, the call may (i) terminate when the budget amount is exceeded or (ii) continue subject to a warning that the call budget has been exceeded with a prompt to obtain additional prepaid budgeted calling time and cost or (iii) continue the call and subsequent calls subject to later payment by the calling customer. Calls are placed directly to the calling party without accessing a special toll number or providing a credit card number. FIG. 1 discloses a communications network 100 which in one form may be a Common Channel Signal Network (CCSN) coupled to a plurality of network switches 80 and 90, such as Electronic Switching System No. 4 (4ESS) for completing calls between local telephones 50, 54. Local Exchange Carriers (LEC) 52 and 56, respectively, are connected to the phones 50 and 54 through links 50' and 54', respectively. The local exchange carriers are also connected to the network switches 80 and 90, through links 52' and 56', respectively. The network 100 is also connected to a Call Expenditure Control Server 125 including a network switch 106 coupled to a control processor 102 through link 105 and to a Voice Response Unit 104 through a link 107. The voice response unit and control processor 102 are connected together through a link 103. The server 125 provides budgeted calling service, either pre-paid or post paid, to customers using the phones 50, 54. The customer obtains the prepaid, budgeted calling service by calling a Customer Service Representative and ordering the service for his unique telephone line. The service enables the caller to place a call directly to a called party without accessing a special toll number or using a

credit card.

Hogan et al, U.S. patent 6,016,343 discloses a system and method for processing telephone calls and providing enhanced services. The call processing system includes a network control processor for controlling the processing and routing of the calls and for providing enhanced features, and a matrix switch for routing calls from an originating location to a terminating location. Operator consoles can be included to provide operator assistance to the caller. The network control processor comprises a central message processor that receives call data, determines the type of call, determines the processing required, and determines whether operator assistance is required. A call route distributor allocates an operator console to the call if required. A billing server is used to track billing information for the call while it is in progress. A database server is provided for database look-ups and storage. The call processing system also includes a validation system, a billing system, a distribution system, and a fraud detection and prevention system. The validation system is used to validate call information to determine whether the call can be placed. The billing system determines rates for calls and calculates the cost of completed calls. The distribution system distributes changes that are made to a master database to the appropriate slave database. The fraud detection and prevention system monitors originating and in-process calls to detect and possibly prevent possible fraudulent uses of phone services and systems, generally described at columns 89-112 cited by the Examiner. A client interface is provided to facilitate communications among applications and DEF records are used to define specific call processing actions. FIG. 15, which comprises FIGS. 16

and 17, and FIG. 18 illustrate data flows that occur within and external to the network control processor when a calling card, credit card, or debit card call is completed according to one embodiment.

Jankowitz et al., U.S. patent 5,875,236 discloses an automated system for detecting and preventing fraudulent telephone calls in a telecommunications network. Prior to completing a telephone call, a database is accessed within a telecommunications network to determine whether the call should be completed. The billing number to which the call is to be charged is compared to a customer record assigned to the billing number and stored in the database. The customer record is checked against a treatment category code which combines geographic call restrictions and thresholding. A call may be identified as potentially fraudulent and blocked if the customer record associated with the billing number indicates that the account is in arrears. In addition, at predetermined intervals during the progress of the call and at the end of each allowed call to be charged to that billing number, the time and/or cost of each call is estimated and added to the total stored in a user-defined threshold counter in the database. When the total stored in the counter exceeds a predetermined threshold limit, a potentially fraudulent call is identified. In this manner, call authorization is performed on a per call basis to prevent fraudulent telephone calls.

Sawyer et al., U.S. patent 6,324,271 discloses a system and method for caller identification, named certified caller ID (CCID) provides an enhancement to existing calling line identification services by providing the terminating end of a telephone call with a cryptographically-certified identity of the caller, rather than the

identity associated with the calling telephone line. A less secure variation of CCID could, at the option of the service provider, indicate that the call has been certified if the call were placed using a telephone calling card with a standard PIN. Alternatively, a more secure variation could be implemented in which the authentication took place in conjunction with a known biometric confirmation mechanism such as a fingerprint scanning, voice recognition, iris scanning of the eye, or hand characterization. Since different authentication mechanisms may be used for CCID, it is envisaged that a certification level would be associated with each call and delivered to the terminating end together with the reserved symbol that denotes that the identity of the caller has been certified. The individual or equipment accepting the call could then act on the certification level as appropriate.

Independent claims 1, 13 and 20 respectively recite a method, computer program product and system for implementing calling card security of the present invention. Each of the independent claims 1, 13 and 20 recite sequentially checking a plurality of predefined options to identify user selected options for the calling card using a stored calling card record, said calling card record storing a calling card number and a time remaining for the calling card; said calling card record including said plurality of predefined options and each said user selected options for the calling card. This step is not disclosed in the Cohen et al. and Hogan et al. references and a combination of all the teachings of the references of record would not achieve the claimed invention as recited by claims 1, 13, and 20.

The Cohen et al. reference teaches a communication system where a

telephone line is uniquely associated with each customer for budgeted telephone calling time and amount, either pre-paid or post-paid. In Cohen et al., the budgeted amount is recorded in the system for calling purposes. Cohen et al. teaches the use of a user selected preference for terminating a call from the uniquely associated customer telephone line when the budgeted telephone amount is exceeded. Hogan et al. describes that various billing methodologies can be provided by the call processing system and describes various real-time fraud detection and monitoring scenarios. The Hogan et al. patent adds nothing to render obvious the claimed invention.

Applicants teach and claim a method, computer program product and system for implementing calling card security. Applicants respectfully submit that the Cohen et al. and Hogan et al. patents do not render obvious the claimed invention.

Neither Cohen et al. nor Hogan et al. provides any suggestion of sequentially checking a plurality of predefined options to identify user selected options for the calling card using a stored calling card record, said calling card record storing a calling card number and a time remaining for the calling card; said calling card record including said plurality of predefined options and each said user selected options for the calling card as recited in independent claims 1, 13, and 20.

Applicants respectfully submit that the subject matter of the invention as recited in independent claims 1, 13, and 20 is patentable over the total teaching Cohen et al. and Hogan et al., and is not rendered obvious when further combined Jankowitz et al. and Sawyer et al. The method for identifying whether a telephone call be to billed to a billing number in a telecommunications network is potentially fraudulent taught by

Jankowitz et al. adds nothing to suggest the subject matter of the invention as recited in independent claims 1, 13, and 20. The system and method to provide the terminating end of a telephone call with a cryptographically-certified identity of the caller of Sawyer et al. adds nothing to suggest the subject matter of the invention as recited in independent claims 1, 13, and 20.

Only Applicants teach a method for implementing calling card security. Only Applicants teach the use of the stored calling card record including said plurality of predefined options and each said user selected options for the calling card.

Cohen et al. and Hogan et al. provide no suggestion of a method for implementing calling card security, as taught and claimed by Applicants. Cohen et al. and Hogan et al. provide no suggestion of using a stored calling card record as taught and claimed by Applicants. Thus, it is submitted that each of the independent claims 1, 13 and 20 is patentable.

Dependent claim 3 further defines the computer implemented method for implementing calling card security of claim 1 wherein the step of checking said plurality of predefined options to identify user selected options for the calling card includes the step of checking for use from a specified telephone number being enabled. This feature of implementing calling card security is not suggested by the references of record. The Jankowitz et al. method for identifying a potentially fraudulent telephone call be to billed to a billing number in a telecommunications network adds nothing to suggest the subject matter of the invention as recited in independent claim 1, nor the subject matter of dependent claim 3. Thus, claim 3 is further patentable over the

references of record.

Dependent claim 5 further defines the computer implemented method for implementing calling card security of claim 1 wherein the step of checking said plurality of predefined options to identify user selected options for the calling card includes the step of checking for voice recognition being enabled. This feature of implementing calling card security is not suggested by the references of record. The Sawyer et al. method for providing a terminating end of a telephone call with a cryptographically-certified identity of the caller adds nothing to suggest the subject matter of the invention as recited in independent claim 1, nor the subject matter of dependent claim 5. Thus, claim 5 is further patentable over the references of record.

Dependent claim 7 further defines the computer implemented method for implementing calling card security of claim 1 wherein the step of checking said plurality of predefined options to identify user selected options for the calling card includes the step of checking for a limited number of calls from a specified telephone number being enabled. This feature of implementing calling card security is not suggested by the references of record. The references of record do not suggest the step of checking for a limited number of calls from a specified telephone number being enabled or the subject matter of dependent claim 7. Thus, claim 7 is further patentable over the references of record.

Dependent claim 11 further defines the computer implemented method for implementing calling card security of claim 1 wherein the step of checking said plurality of predefined options to identify user selected options for the calling card includes the



step of checking for a limited time for calls being enabled. This feature of implementing calling card security is not suggested by the references of record. The Jankowitz et al. method for identifying a potentially fraudulent telephone call be to billed to a billing number in a telecommunications network adds nothing to suggest the subject matter of the invention as recited in independent claim 1, nor the subject matter of dependent claim 11. Thus, claim 11 is further patentable over the references of record.

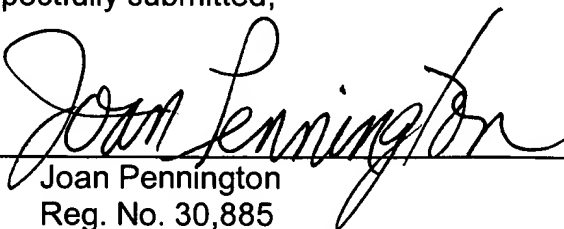
Dependent claims 2-12 and 14-19 further define the invention of patentable claims 1 and 13, and are likewise patentable.

Applicants have reviewed all the art of record, and respectfully submit that the claimed invention is patentable over all the art of record, including the references not relied upon by the Examiner for the rejection of the pending claims.

It is believed that the present application is now in condition for allowance and allowance of each of the pending claims 1-20 is respectfully requested. Prompt and favorable reconsideration is respectfully requested.

If the Examiner upon considering this amendment should find that a telephone interview would be helpful in expediting allowance of the present application, the Examiner is respectfully urged to call the applicants' attorney at the number listed below.

Respectfully submitted,

By:   
Joan Pennington  
Reg. No. 30,885  
Telephone: (312) 670-0736